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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/805,897	03/22/2004	Hebah Ahmed	68.0274CNT(SHL.0231C1US)	1919

7590 01/31/2005

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EXAMINER

GAY, JENNIFER HAWKINS

ART UNIT	PAPER NUMBER
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3672

DATE MAILED: 01/31/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

10/805,897

Applicant(s)

AHMED ET AL.

Examiner

Jennifer H Gay

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 03 December 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 28-46 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 28-46 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- ☐ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Priority***

1. This application filed under former 37 CFR 1.60 lacks the correct reference to the prior application. A statement reading "This is a continuation of Application No. 09/970,353, filed 03 October 2001." should be entered following the title of the invention or as the first sentence of the specification. Also, the current status of all nonprovisional parent applications referenced should be included.

### ***Claim Objections***

2. The numbering of claims is not in accordance with 37 CFR 1.126 which requires the original numbering of the claims to be preserved throughout the prosecution. When claims are canceled, the remaining claims must not be renumbered. When new claims are presented, they must be numbered consecutively beginning with the number next following the highest numbered claims previously presented (whether entered or not).

Misnumbered claim 32 has been renumbered claim 31.

### ***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 28-31, 33-41, and 44-46 are rejected under 35 U.S.C. 102(b) as being anticipated by Feitzelmayer (US 4,976,796; hereafter referred to as Feitz).

*Regarding claim 28:* Feitz discloses an apparatus that includes the following features:

- A weld coupling **25**, **26** adapted to weld an outer housing **20** of a first cable segment **26**, **27** to a second cable segment **28**, **29**.
- A thermal insulator **24'** adapted to prevent thermal damage to a communication line of the first cable segment when the weld coupling

is welded to the outer housing. *It has been held that the recitation that an element is "adapted to" perform a function is not a positive limitation but only requires the ability to so perform. It does not constitute a limitation in any patentable sense. In re Hutchison, 69 USPQ 138.*

*Regarding claim 29:* The thermal insulator indirectly contacts the outer housing and contacts the communication line (Figure 3).

*Regarding claim 30:* The apparatus further includes an insulating material 24 that is separate from the thermal insulator and is located between the outer housing and the communication line to protect the communication line. The insulating material is displaced by the thermal insulator near the weld coupling thus preventing thermal damage to the insulating material when the weld coupling is welded to the outer housing.

*Regarding claim 31:* The insulating material indirectly contacts the outer housing and contacts the communication line and thermal insulator indirectly contacts the outer housing and contacts the communication line (Figure 3).

*Regarding claim 33:* The insulating material transverses an axial length of the first cable segment except where the insulating material is displaced by the thermal insulator (Figure 3).

*Regarding claim 34:* The thermal insulator would be adapted to prevent melting or outgassing of the insulating material.

*Regarding claim 35:* The thermal insulator is located closer to the weld than the insulating material.

*Regarding claim 36:* The weld coupling includes a sleeve 23 that is approximately centered where the communication line contacts another communication line of the second cable segment.

*Regarding claim 37:* The apparatus includes another thermal insulator (the second half of 24') separate from the first that is adapted to prevent thermal damage to a communication line of the second cable segment.

*Regarding claim 38:* Feitz discloses a method that involves the following steps:

- Providing a weld coupling 25, 26 adapted to be welded to a first cable segment 26, 27 to a second cable segment 28, 29.

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- Preventing thermal damage to a communication line of the first cable segment when the weld coupling is welded to the first cable segment.

*Regarding claim 39:* The step of preventing involves providing a thermal insulator 24' between an outer housing 20 of the first cable segment and the communication line.

*Regarding claim 40:* The thermal insulator indirectly contacts the outer housing and contacts the communication line (Figure 3).

*Regarding claim 41:* The outer housing is adapted to be welded to the weld coupling.

*Regarding claim 44:* The method further involves prevent thermal damage to the communication line during the formation of a metal weld between the weld coupling and the outer housing of the first cable segment.

*Regarding claims 45 and 46:* The method further involves preventing thermal damage to a communication line of the second cable segment when the weld coupling is welded to the second cable segment using a thermal insulator (the second half of 24') from that that protects the communication line of the first cable segment.

### ***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 32, 42, and 43 are rejected under 35 U.S.C. 103(a) as being unpatentable over Feitzelmayer (US 4,976,796) in view of Bahder et al. (US 3,846,578).

*Regarding claims 32 and 42:* Feitz discloses all of the limitations of the above claims except for the insulating material being a polymeric material.

Bahder et al. discloses a splice similar to that of Feitz. Bahder et al. further teaches two insulating materials 8, 9 and 15, separate from one another, that are both made of a polymeric material.

It would have been considered obvious to one of ordinary skill in the art, at the time the invention was made, to have modified Feitz such that the insulating material was made of a polymeric material as taught by Bahder et al. in order to have provided an effective splice (2:62-3:5). Such an insulating material would have created a more versatile splice that could be built to whatever specifications were required (1:65-2:2).

*Regarding claims 42 and 43:* The insulating material of Feitz is displaced near the weld coupling by the thermal insulator thus preventing thermal damage to the polymeric material.

### ***Response to Arguments***

7. In view of applicant's amendment, the objection to the abstract has been repeated. The objection to the numbering of the claims has been repeated because, though applicant acknowledged the objection, the numbering of the claims has not been corrected in the current listing of the claims. The examiner notes that the Preliminary Amendment did indeed contain a priority statement as indicated by applicant. However, the statement did not include the filing date of the application.

8. Applicant's arguments filed 03 December 2004 have been fully considered but they are not persuasive.

Applicant argues that Feitzelmayer does not teach a thermal insulator to prevent damage to a communication line of a cable segment when a weld coupling is welded to the cable segment.

It is first noted that the claims recite that the thermal insulator protects the lines when the housing is welded to the lines not when the lines are welded together. The insulator and the lines would have to be inserted into the housing prior to welding the housing to the cable thus the thermal insulator would protect the lines.

Secondly, and more to the point, column 5, lines 52-54 state that all of the weld couplings and seams can be welded after the complete assembly of the internal portions of the splice. Therefore, the thermal insulator would have been placed around the lines prior to any welding thus offering protection to the lines.

Applicant has also objected to the examiner's statement that the phrase "adapted to" does not provide structural limitations and contends that the examiner has thus ignored some of the claim limitation.

To the contrary, the examiner has addressed all of the limitations in the claim including the "adapted to" phrase. The examiner included the statement regarding "adapted to" phrases merely as a reminder to applicant that the structural limitation that corresponds to the "adapted to" phrase merely has to be capable of performing the recited function and a specific statement in the reference that the element does perform that function is not required.

### ***Conclusion***

9. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).


A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.


10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jennifer H Gay whose telephone number is (703) 308-2881. The examiner can normally be reached on Monday-Thursday, 6:30-4:00 and Friday, 6:30-1:00.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Bagnell can be reached on (703) 308-2151. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
David Bagnell  
Supervisory Patent Examiner  
Art Unit 3672

JHG   
January 24, 2005